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(21)	10-2000-0059667	(65)	10-2001-0070133
(22)	2000 10 11	(43)	2001 07 25

(30) 09415913 1999 10 12 (US)

(73) 가 가 1 32 1

(72) 60625 1 . 2454

60615 .8 1645

(74)

:

(54) -

가 (finger like contactor)

가

9

1
2
3
4 (a)-(e) 3

가

5 ()
 ,
 6 5 ,
 7 4 ,
 8a ,
 ,
 8b 8a ,
 9 2
 10a 9 - ,
 10b 10a ,
 11a-11d ()

- <
- 10 :
- 20 :
- 22 :
- 23 :
- 24 :
- 28 :
- 30 :
- 31 :
- 33 :
- 35 :
- 40 :
- 43 :
- 48 :
- 52 :
- 54 :
- 56 :
- 62₁,62₂ :
- 100 :
- 110 :
- 120 :
- 121 :
- 124 :
- 130 :
- 140 :
- 141 :
- 150 :
- 160 :
- 170 :
- 180 :
- 190 :
- 193,195 :
- 194 :
- 196 :
- 197 :
- 240 :
- 250 :
- 252 :
- 260 :
- 262,265 :
- 263 :
- 300 :
- 320 :
- 400 :
- 510 :

>

(finger)) 가 , IC , (interface assembly) , (total stack-up)

LSI VLSI , (probe contactor)

· - (burn-in)

C , IC ,

가 , IC ,

(handler) , IC ,

(510) (500) (100) (100) (110) (400)

(400) (100)

IC IC 가 () ,

2 (400,) (100) (1) (pogo-pi

40) (100) (400) , - 2

n block), (120) (electrical footprint), (140) 2

(100) (150) (frog)

(120) (121) (160) .

' (-)(130) (120) (400) (121)

ZIF - (130) (124) (120) (121)

2 (141) (100) (400) (140)

) (300) IC (170) (300) (300) (400) (chuck,180

(300) (170) (cantilever) (needle)

(190)

(170) (130) (141)

(141) (124) (120) (121)

(121) (100) (150) (150)

(190) (180) (300)

(300) 가 , (300) (300)가 (30

0) (300)가 (300)가

3 2 (170) (170) 가 ,

(190)가 (300)

(400) (180) 2 (190) (300)

(bump) (190) (170) ()

) (194) , 2 - (141) (197)

(170)

(170) 50ohms

(300)

(193,195)

(170) 가
(170)

4 (a) (b) (170) (197) 4 (c) (196, (194) (190) (194) (190) 20 30mm (L) (194) (190) 4 (d) (e) (170)

194) (190) 4 (e) 4 (d) (194) (190) (193, 195)가 (surge pu 가 (193) 10μF (195) 0.01μF 가 DUT()

200MHz 1GHz 가 32 가 3 가

(pin count)

(interface assembly)

- (total stack-up)

LSI () (silicon finger contactor)가

가

가 -;

(trace);

가

(elastomer sheet);

(probe card);

(pin block).

가

((20)) (30) 5-11 (10) 5 (10) (30)가 (10)
 (300) (30) (10) (300) (320)
 5 (30) (20) (30)
 (20) (30) (20) (300) (320) 50μm
 (30) 5 6 (20) IC 2
 (probe card,170) 가 (30) 가
 2GHz 가 가 32
 2000 가 가 (20) (30)
 5 (30) (320) 가 가 (300) (30)
 (40) (30) () (35) (30) (20) (20) (35)
 (24) (35) (trace,24) (20) (28)
 (20) (via hole, 23) (22) (22) (20)
 (300)가 (pogo-pin block) IC (30) (300) (320) 가
 (24), (23) (320) (20) (22) (30) (20) (22) (30)
 IC

20) (30) , (35) (35) (300)가 ((35) (320)

(scrubbing effect) -

(300) (320) , , , (30) (32 (20),

0) (320) (300) (30) (30) ()

(35) 가 , , , , , 가 가 100-500 μ m 가

가 100-600 μ m , 50 μ m (30) (320) 30-50 μ m

6 (30) 가 5 (20) (24)

(30) 6 (23) (22) (33) (20)

(30) (40) () (33) (30)

(6 (30)) (33) 가 UV 가

7 (30)가 4 (20) (40) 5 6 (24)

(30) (35) , (20) (24) (35) (2

8) (20) (20) (23) (22) (22) (20)

IC

(30) 가 , 가 , 32

2GHz 2000

8a 8b 8a , 8b (30)가

8a 5 6 , 가 6, 7 8b (23) (22)

(24) (30) 6 (30)) (33)

(33) (30) (40) (20) () (30)) (33)

(33) (30) (30) (8b (30) (20)) (40) .

(30) , 8a UV 가 (40)

9 (interface assembly) - (total

stack-up) (250), 2 (250), (rout

ing board,260,) 9 (10) - (130), (130,

(250), (260,) - (130)

(30) 2 (24) (120) (100) 가

(300) 가 , ,

((300) (320)) (120) -

(130,) (260) (140)

(120) 2 (100) (150,) (260)

(262,265) (262,265) (263)

(130) - (260) (250)

(250) (10) (260) (250)

(22) (262)

(250)

9 (10) (22) , (30) (35) (31)

320) (22) (31) (22) (

(250) (31) (22) (31)

(22) (250)

(31) 40 μ m

(31) (31)

(31) (31) (22)

10a 9 (250) 10b 10a (252)

(250) (250) (250)

(252,) 9 0.2mm 0.05mm

11a-11d (30)

09/222,176

) (62₁,62₂) 11d (62₂) 5 8a (20)

11a (48) (40) () (43)

(SiO₂) (54) (52) (48)

(56) (SiO₂) (40) () (40)

111) (62₁,62₂) (40) 11b (40) (40) () (40)

(62₂) (40) (dicing) 54.7. (43)

(,comb) () 11c (30)

11d (35)

IC , IC

가 가

(57)

1. (contact target)

(contact beam) 가 (tip)가

— ;

가 - ;

(trace)

2. 1 , UV() ,

3. 1 , ,

4. 1 , ,

5. 1 , (via hole) ,

6. 1 ,

7. 1 ,

8. 1 ,

9. 1 ,

10. (contact assembly) , (interfacing)

가 , 가

— ; (elastic sheet) , (elastomer she

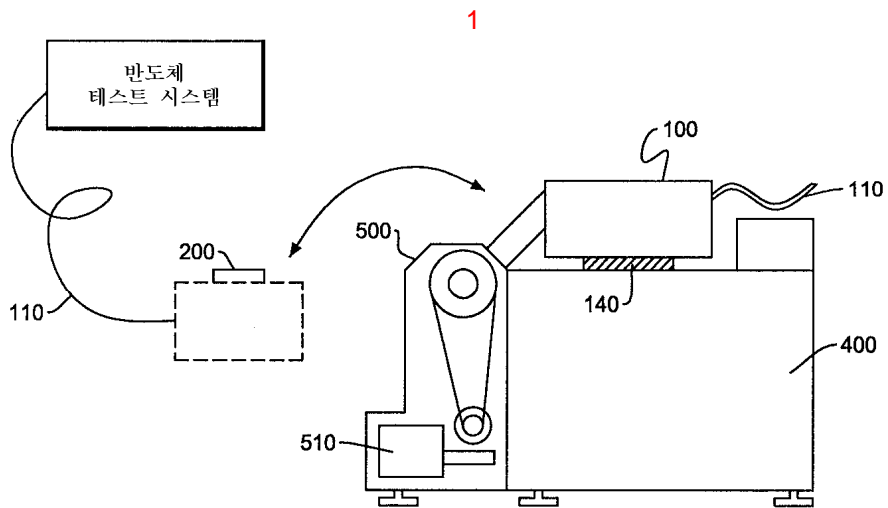
가 et); (probe card);

k) (pin bloc

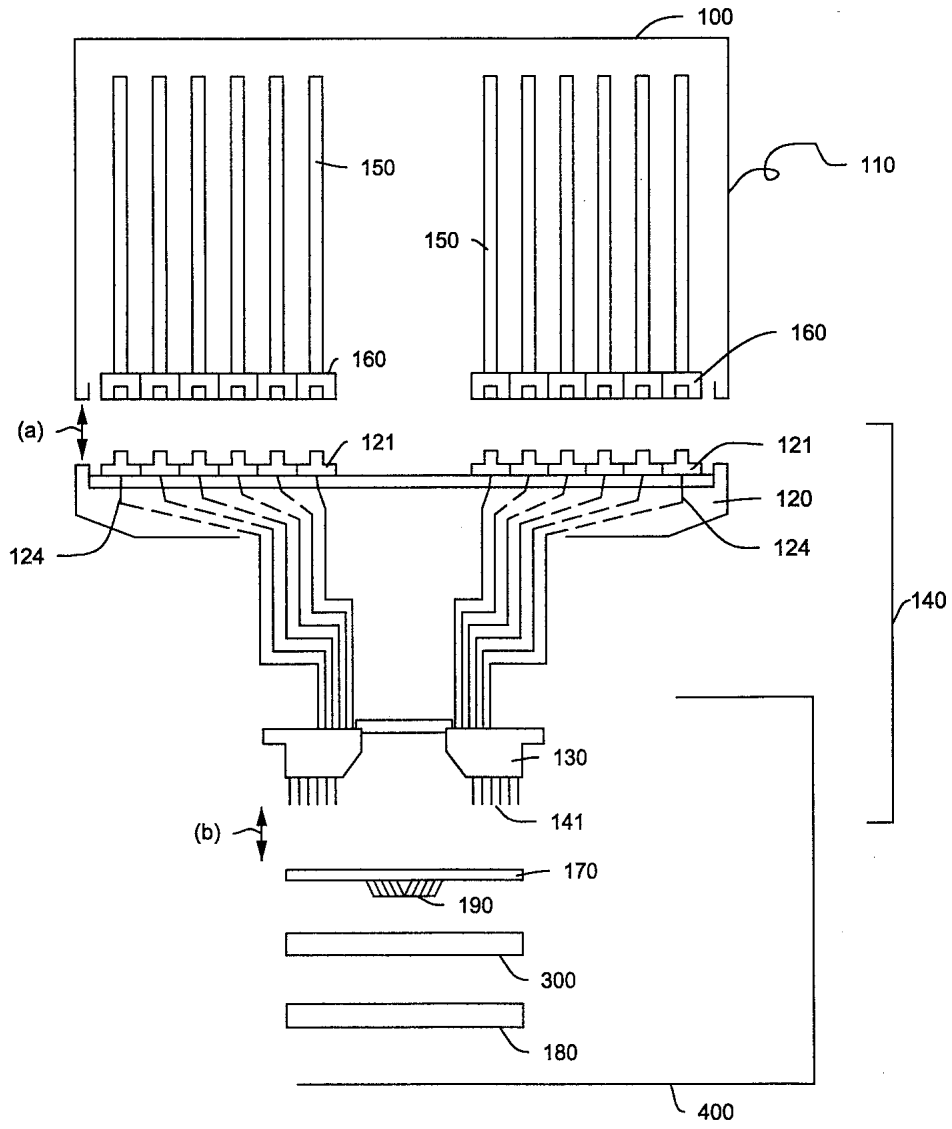
- 11. 10
- 12. 10
- 13. 10
- 14. 10
- 15. 10
- 16. 10
- 17. 10
- 18. 10

가

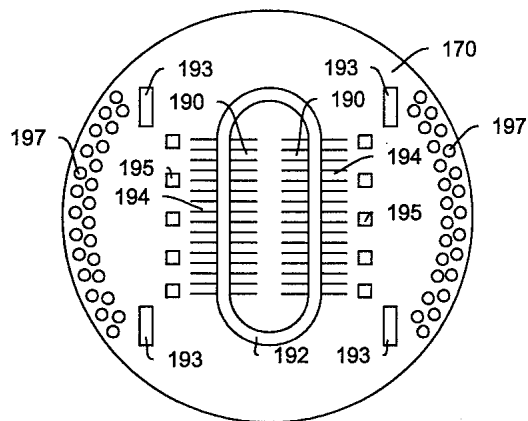
UV()

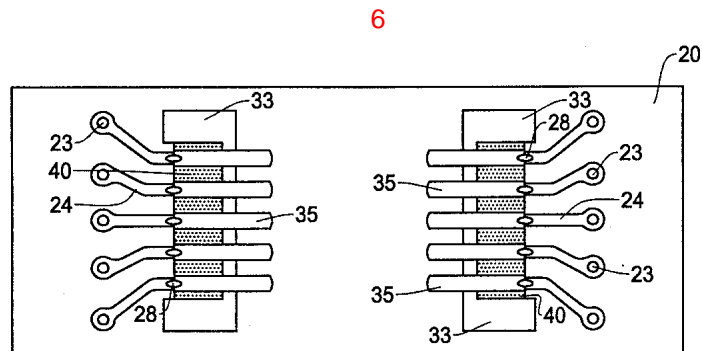
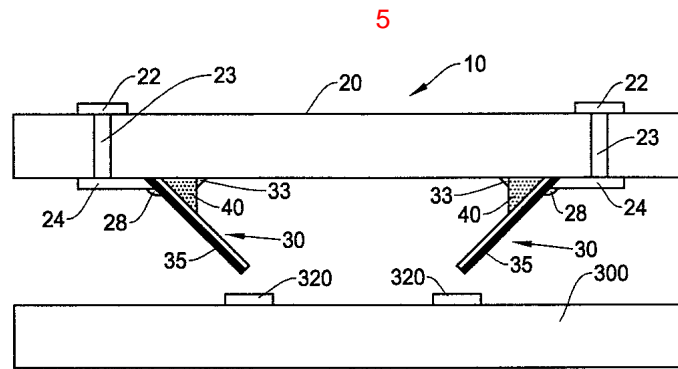
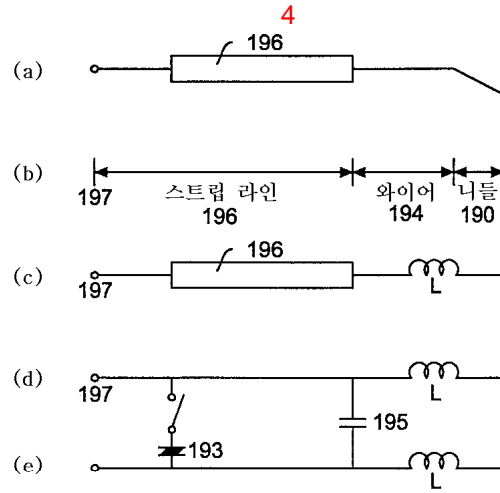


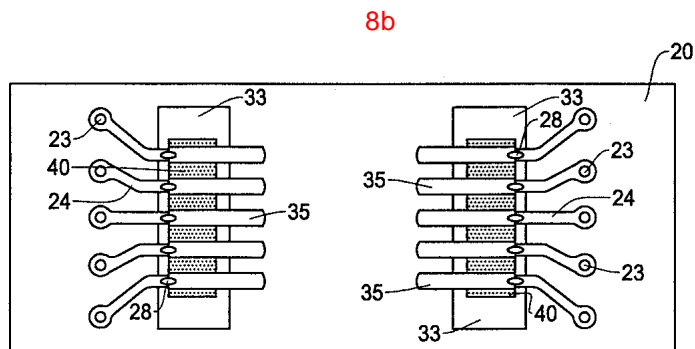
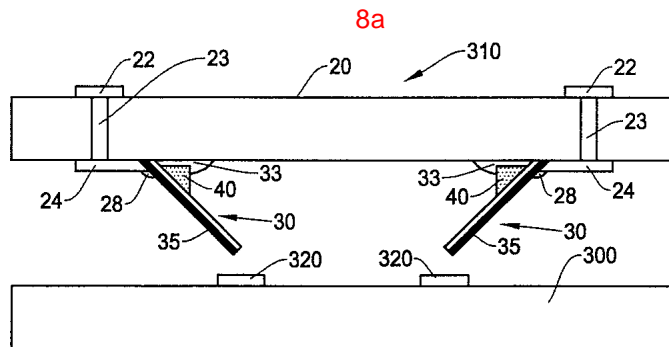
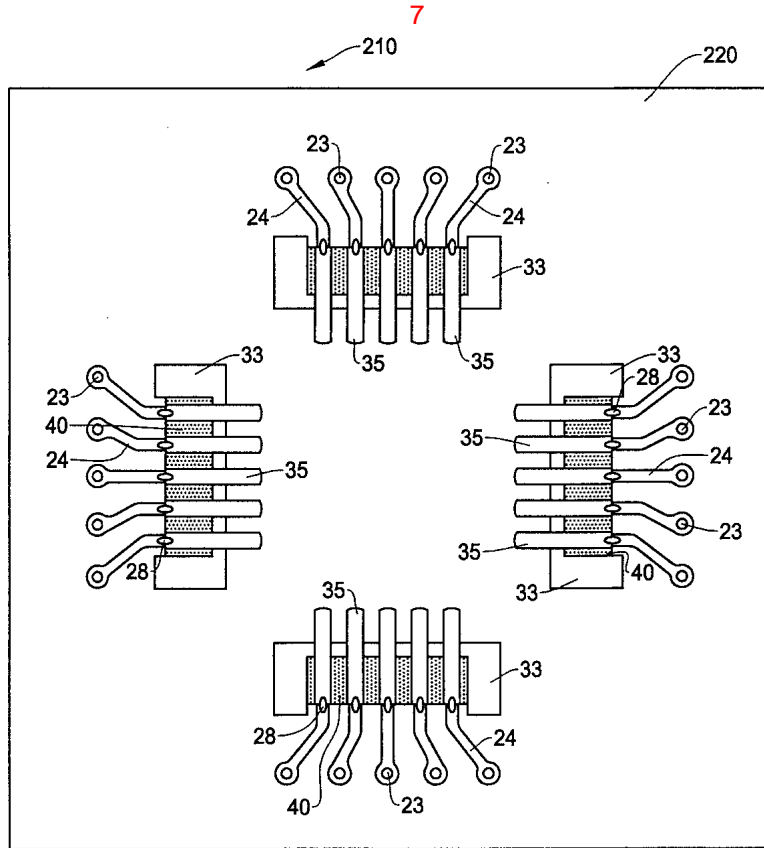
2



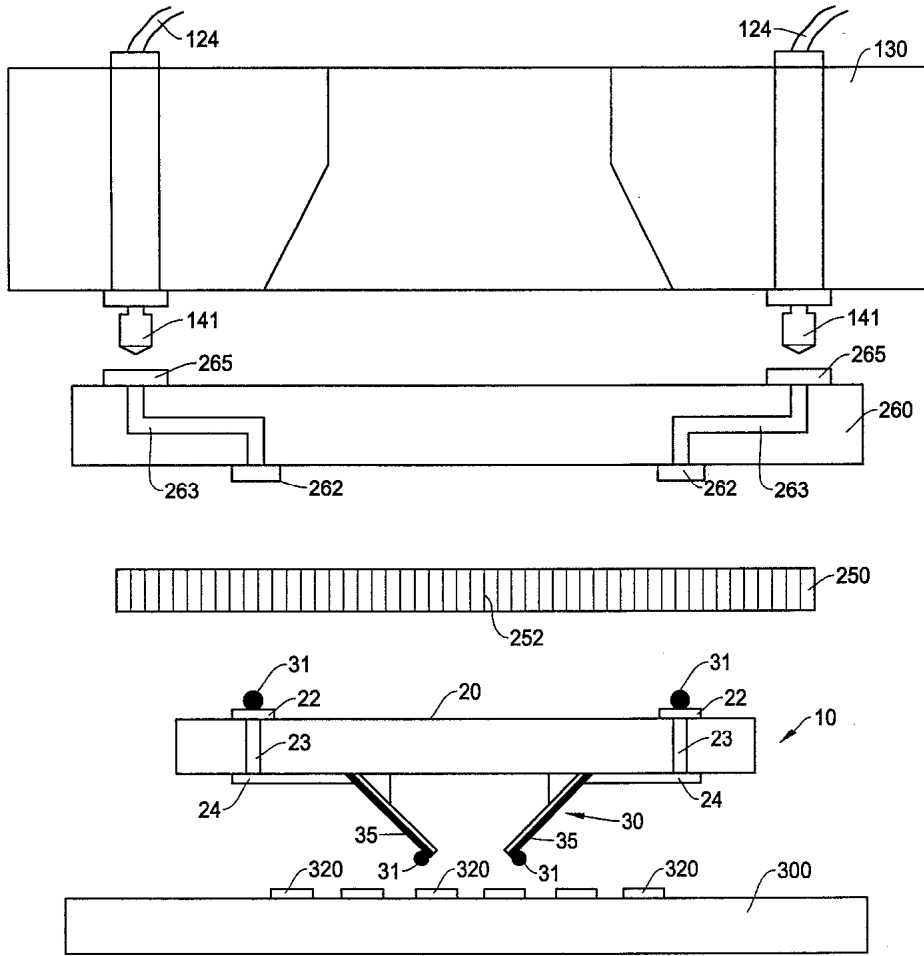
3



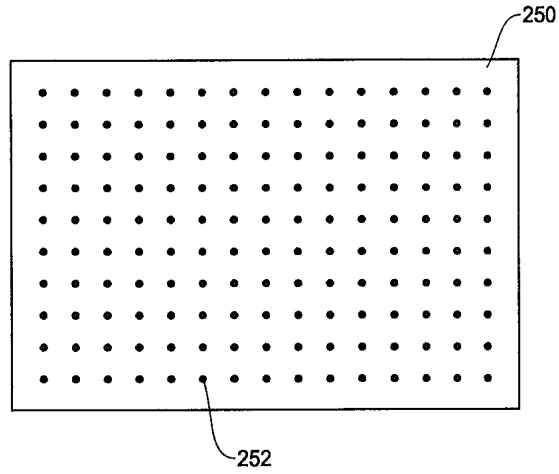




9



10a



10b

